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APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,340	1,340 09/12/2004		Hideaki Saito	SIMTEK6977	5339
25776	7590	05/20/2005		EXAM	INER
ERNEST A.		ER, ATTORNEY	OLSON, LARS A		
NEWPORT E			ART UNIT	PAPER NUMBER	
	•			3617	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<u> </u>		1				
•		Application No.	Applicant(s)			
Office Action Summan		10/711,340	SAITO, HIDEAKI			
	Office Action Summary	Examiner	Art Unit			
-		Lars A Olson	3617			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)	Responsive to communication(s) filed on					
·		action is non-final.				
3)□						
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-7 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-5 is/are rejected.</li> <li>7)  Claim(s) 6 and 7 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Applicat	ion Papers					
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on 12 September 2004 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
2) Notice 3) Information	ot(s) See of References Cited (PTO-892) See of Draftsperson's Patent Drawing Review (PTO-948) See of Draftsperson's Patent Drawing Review (PTO-948) See No(s)/Mail Date 12102004.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hall et al. (US 4,064,824).

Hall et al. discloses the same hydraulic system for controlling the position of an outboard motor on the hull of a watercraft as claimed, as shown in Figures 1 and 2, said hydraulic system being comprised of a cylinder body assembly, defined as Part #35, defining a cylinder bore in which a piston, defined as Part #41, is supported for reciprocation and divides said cylinder bore into two chambers, defined as Parts #37 and 39, that are located on opposite sides of said piston, a piston rod, defined as Part #43, that is affixed to said piston and extends through chamber #39 as well as externally of said cylinder body assembly for connection to said outboard motor, defined as Part #11, said cylinder body being connected to said hull of said watercraft at Part #13 for effecting movement of said outboard motor relative to said hull upon pressurization of one of said chambers, and a hydraulic system, as shown in Figure 2, for selectively pressurizing chamber #37 in order to elevate said outboard motor relative to said hull, said hydraulic system being comprised of a reversible pump, defined as

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Part #73, for pressurizing fluid and a valve system, as shown in Figure 2, for communicating the output of said pump with chamber #37, said valve system being further comprised of a first check valve, defined as Part #121, that is interposed between said pump and chamber #37, and is adapted to be opened upon pressurization for flow toward chamber #37, and a second check valve, defined as Part #213, that is interposed between said first check valve and chamber #37, and is adapted to be opened upon pressurization for flow toward chamber #37, where either of said first and second check valves preclude flow from chamber #37 when not pressurized. Said first check valve is a part of a shuttle valve, as shown in Figure 2, that is comprised of oppositely acting check valves, defined as Parts #121 and 111, and a shuttle piston, defined as Part #99, that is disposed between said pair of check valves, where said opposite sides of said shuttle piston are in communication with the opposite sides of said pump for selective pressurization depending upon the direction of operation of said pump, as shown in Figure 2. A third check valve, defined as Part #163, is also interposed between said second check valve and chamber #37, as shown in Figure 2, and is adapted to be opened upon pressurization for flow toward chamber #37, so that each of said first, second and third check valves preclude flow from chamber #37 when not pressurized.

# Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall et al. in view of Nakase (US 4,702,714).

Hall et al., as set forth above, discloses all of the features claimed except for the use of a second check valve that is part of a shuttle valve comprised of only one check valve and a shuttle piston disposed in a closed end bore.

Nakase discloses a hydraulic system for controlling the position of an outboard motor on the hull of a watercraft, as shown in Figures 1-8, said hydraulic system including a pump, defined as Part #44, a first check valve, defined as Part #61, that is part of a first shuttle valve with oppositely acting check valves, defined as Parts #61 and 58, and a second check valve, defined as Part #76, that is part of a second shuttle valve comprised of only one check valve, defined as Part #76, and a shuttle piston, defined as Part #73, that is disposed in a closed end bore, defined as Part #72, with said second check valve being disposed at the end of said bore opposite said closed end, as shown in Figure 3. The area between said second check valve and said shuttle piston #73 is in communication with the area between said first check valve and chamber #39 of a tilt cylinder assembly, defined as Part #23, and the area between said shuttle piston #73 and the closed end of said bore of said second shuttle valve is in open communication with the area between a shuttle piston #53 of said first shuttle valve and check valve #58, as shown in Figure 3.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a second check valve that is part of a single check valve shuttle valve with a closed end bore, as taught by Nakase, in place of the second check valve of the hydraulic system as disclosed by Hall et al. for the purpose of providing a hydraulic system for controlling the position of an outboard motor on the hull of a watercraft with two shuttle valves that openly communicate in series with one another in order to provide better control of a tilt cylinder and the tilt position of said outboard motor.

## Allowable Subject Matter

5. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakamura et al. (US 6,328,616 and US 6,213,823), Taguchi (US 4,909,766), Nakahama (US 4,631,035) and Hall et al. (US 4,498,871 and US 4,395,239) all disclose various hydraulic systems for controlling the position of an outboard motor on the hull of a watercraft.

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7. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (571) 272-6685.

lo

May 16, 2005

LARS A. OLSON PRIMARY EXAMINER

5/16/05